

## Narrating resuscitation: theory, knowledge, and the cultural life of eighteenth-century vitalism

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## Narrating Resuscitation: Theory, Knowledge, and the Cultural Life of Eighteenth-Century

### Vitalism

*But it is a miracle, that a dead man should come to life*<sup>1</sup>

In Maria Edgeworth's novel, *Belinda* (1801), there is a little remarked moment in which the "suspended animation" of Clarence Hervey is restored, following his near-drowning in the Serpentine.<sup>2</sup> The name of the man who has such powers over "animation" is Dr X. Whilst "X" suggests his name is unknown, it might also be understood as the necessary obscuring of an identity which is otherwise all too legible; indeed, the novel seems almost as interested in revealing Dr X's identity as obscuring it. He is "Dr X—the writer" (93), a "literary philosophic physician" (317) of "wit" (95), "genius" (93), and "great literary reputation" (111) who, "in judging of the human character," warns against "entirely trust[ing] to analogies and allusions taken from the vegetable creation" (112). Vegetable analogies debated by a witty, philosophical, literary physician suggest Erasmus Darwin, author of *The Botanic Garden* (1792), which playfully deployed analogies between plants and humans to extend a "spirit of animation" onto vegetable life.

That Darwin, the pre-eminent literary botanical author of the age, might lurk in a novel which repeatedly links botany with reason and modesty is perhaps not surprising.<sup>3</sup> But Dr X's expertise in restoring the powers of "animation," in the first scene in which he appears in the novel, equally points to Darwin. Both *The Botanic Garden* and Darwin's medical treatise *Zoonomia* (1794-6) attempt to theorise the very powers of animation which are also the object of the practice of resuscitation from which Hervey benefits at Dr X's hands. Meanwhile, Hervey's resuscitation combines the credible and probabilistic (his

recovery) with the mysterious and unknown (Dr X's identity; the exact means by which the recovery is achieved); and it incorporates into realist novelistic discourse an event – recovery of the dead – a full explanation of which remained beyond contemporary medical understanding. Like Dr X himself, something was both partially revealed, and remained hidden in resuscitation, a practice which, despite its uncertain epistemological status, residing somewhere between proven fact and object of speculation, was nevertheless accommodated in Edgeworth's novel. It was arguably this potent mix of mystery (the unknowability of exactly how resuscitation is achieved) and the resonant, undeniable, experiential evidence of successful resuscitation which gave resuscitation narratives their fascination — exploited by Edgeworth to provide a dramatic first entrance for Dr X, a central moral authority in her novel.<sup>4</sup> As David Hume observed, the miraculous gives rise to the “agreeable emotion” of “surprise and wonder,” not only for those who experience it directly, but even for those who cannot believe “those miraculous events, of which they are informed.”<sup>5</sup> Whilst this tendency of the mind to give pleasurable credence to observed events is at the heart of Hume's sceptical attack on knowledge of causation — and hence on mechanical natural philosophy — *Belinda* demonstrates how it can also be exploited by fiction. This paper explores how the mix of mystery and fact presented in the scene of animation, and manifested by the resuscitated body as the site of such a compelling conjunction, is negotiated in contemporary scientific theories of life and theoretical reflections on natural philosophical method; it also addresses responses to the uniquely suggestive event of resuscitation in cultural and political domains. The scientific unknowns addressed by reanimation, I suggest, make peculiarly fertile ground for cultural responses of various kinds, not only in novels, but also in social theory and political critique.

By the time *Belinda* was published, the practice of resuscitation of the drowned was well-established, following the founding of Humane Societies across Europe and America from 1767 onwards.<sup>6</sup> (The association of resuscitation with being “humane” is perhaps referenced in the repeated description of Dr X as “benevolent.”). The most famous literary treatment of resuscitation, Mary Shelley’s *Frankenstein*, whose eponymous protagonist seeks to “bestow animation upon lifeless matter” and “renew life where death had apparently devoted the body to corruption,” and which features at least four instances of resuscitation, attempted or achieved (including one attempt to revive a drowned person) had yet to appear; but Shelley’s mother, Mary Wollstonecraft, had been the beneficiary of resuscitation following an attempt to drown herself in 1795.<sup>7</sup> Fiction’s exploitation of the sensational possibilities of a return to life from apparent death continued well into the nineteenth century, as suggested, for instance, by Bram Stoker’s *Dracula* (1897), where Lucy’s reanimation is achieved through the same techniques as were recommended by late eighteenth-century advocates of resuscitation. Fictional treatments of resuscitation more contemporary with Edgeworth appear in Frances Burney’s *The Wanderer* (1814) and Thomas Holcroft’s *Anna St. Ives* (1792).<sup>8</sup>

The practice of resuscitation in Britain from the second half of the eighteenth century was accompanied by theoretical explanations of the practice. This paper particularly addresses links between resuscitation and vitalist medicine and physiology, especially that associated with the Edinburgh medical school, a noted centre for vitalist medicine in this period. Any explanatory account of resuscitation requires a theory of life, and vitalist approaches in burgeoning biological and physiological sciences from the mid-century marked a sustained effort to provide that, especially as an alternative to natural

philosophy's otherwise dominant mechanism. In the words of Peter Hanns Reill, vitalism's attempt to understand the operation of life in the material body entailed "positing ... a capacity lying between the extremes of mind and body where real reality was located, and proposing a new theory of matter, activated by vital forces or principles."<sup>9</sup> Darwin's supposition of the existence of a "living principle, or spirit of animation, which resides throughout the body, without being cognizable to our senses, except by its effects," is representative of this approach, yet, as with many such vitalist suppositions, the exact nature of the "living principle, or spirit of animation" which he postulates remained unclear. Whilst it might be an "immaterial agent supposed to exist in or with matter" but nevertheless "quite distinct from it," an animating agency or force might equally be "matter of a finer kind."<sup>10</sup>

Darwin's rather hedged account of an either material or immaterial "spirit of animation" is characteristic of the looseness with which any vital principle was sketched, and indicative of the challenges faced by those working to establish a "new ontology" for the life sciences.<sup>11</sup> These challenges were two-fold. Not only was it recognised that it was impossible to explain vital motions of living bodies (the circulation of the blood, the actions of digestion, muscles, the reflex, and so on) through mechanical models, but the minuteness of many body parts — the "hidden parts of nature" — resisted empirical examination.<sup>12</sup> Newtonian analogy, or the deployment of a "provisionally inexplicable explicative device" presented one methodological solution; as Newton had with gravity, the postulation of an unknown would enable regularities to be deduced from it, compensating for the difficulty of identifying an animating force whilst sustaining empirical investigation into living bodies.<sup>13</sup> Darwin's "living principle, or spirit of animation," in both its looseness, and in the support it

provided for the immense apparatus of his knowledge of, and speculations, about the living body, operates as such a postulated unknown.

Vitalism in medicine and physiology thus operated in a very particular epistemological space, characterised by the supposition of a life force or principle which it was unable to identify or further explicate; yet in this principle nothing less than the difference between life and death was assumed to lie.<sup>14</sup> The particular attraction which resuscitation held for vitalist sciences of life thus becomes clear, as the practice of resuscitation addressed precisely the mystery at their heart: the difference between a living body and a dead one. Resuscitation suggested the possibility of supplementing necessarily “provisionally inexplicable” explications with demonstrable evidence via the reanimated body; yet at the same time, the reanimated body also presented medical practice at its most dramatically efficacious despite a lack of knowledge of the cause of its success. Medical literature on resuscitation shows that, whilst broad agreement existed (barring some small variations) over methods for the recovery of drowned persons, theoretical explanations of the practice and reasons for its success varied widely.<sup>15</sup> Instead, the mystery of life itself reverberates both in medical literature on resuscitation and in other cultural forms responding to the practice. If medical accounts of resuscitation exploited the ‘provisionally inexplicable’ to offer believable, even miraculous, narratives of medical treatment and intervention, the second part of my paper shows how narratives of resuscitation were also taken in a different direction.

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When the tale of eighteenth-century resuscitation is told, its connections to Scottish vitalism are not often emphasised.<sup>16</sup> John Fothergill’s reading to the Royal Society, in 1745,

of Scottish surgeon William Tossach's account of his resuscitation of a miner, is usually identified as leading to the foundation of the Royal Humane Society in 1774.<sup>17</sup> But Tossach's account was also read to the Edinburgh Medical Society, and published in its *Medical Essays and Observations* in 1746.<sup>18</sup> This audience is important, as the Medical Society was closely associated with attempts, from the 1740s onwards, to reject the iatromechanism dominant at Edinburgh since the founding of the medical school in 1726, and to develop alternative vitalist theories.<sup>19</sup> Robert Whytt's *Essay on the Vital and other Involuntary Motions of Animals* (1751), presented to the Society, exemplifies the new physiology of Edinburgh vitalism: involuntary bodily actions were explained through postulated notions of organic conjunction and active forces, including a sentient principle, superadded to animal fibres to give them power of sensation and generating motion.<sup>20</sup>

According to Sean Quinlan, Edinburgh at this time was "electrified" by new work on apparent death by Parisian doctor Jacques-Bénigne Winslow.<sup>21</sup> Winslow's work, which appeared in various editions throughout the 1740s, mooted the possibility of life continuing even after apparent death, making clear the tantalising possibility of recovering the seemingly dead back to life. Winslow's work clearly connected with Tossach's account of the resuscitation of the miner; indeed, that account was reprinted in at least one of Winslow's works.<sup>22</sup> Tossach resuscitated the miner by blowing air into his mouth, and his account also lists other interventions which were to become part of the canon of resuscitation advice: letting blood; letting the subject be "pulled, pushed and rubbed, to assist the motion of his blood as much as I could;" washing the face with water; rubbing "sal volatile on his nose and lips," and so on. Tossach offers no explanation for the success of his intervention, but a footnote at the end of his account in the *Medical Essays* refers the reader to Edinburgh

physician John Stephenson's "Essay on the cause of animal heat, and of some of the effects of heat and cold on our bodies," published in an earlier volume of the *Medical Essays*, which Tossach claims accounts "handsomely" for "this extraordinary affair."<sup>23</sup>

Stephenson's essay rejects previous explanations of recoveries from apparent death founded on the undetected continuation of the heart and lungs, and offers his own theory of animal heat, whereby, in a process akin to fermentation or putrefaction, changes in minute parts of bodily fluids stimulate the heart to restore its motion and restart circulation, and thereby restore life. He asserts that "after the motion of the heart, arteries and lungs ceases, there often remains a small degree of a vital principle, but such a degree as well merits attention.... After a full stop of all those organic motions on which life is said to depend, the juices frequently retain so much of the animal process, as in many instances serves to maintain warmth for a long time; and in others with proper cherishing might restore life entirely" (239). It is this notion of animal heat, not the recovery of the apparently dead, which is the main focus of Stephenson's essay, but it is notable that, in a pattern to be continued in writings by William Cullen, John Hunter, and others, recovery from the dead offers occasion for the elaboration of a theory of organic function, in part propounded via the notion of a 'vital principle', elaborated with varying degrees of precision and specificity.

The essay is also notable – in another recurring note in medical writing on resuscitation literature – for Stephenson's rejection of mechanical methods, and for his assertion of the need to find explanatory models more appropriate for, and specific to, the living body.<sup>24</sup> Rejecting friction as a cause for animal heat, he asserts that it is "an unphilosophic partiality for the mechanics to maintain, that our juices have all their heat



communicated to them from the solids” (243). Rather, “the minute component parts of solids, have a set of laws peculiar to them, and their intimate changes and actions on one another, are not to be accounted for by the coarser mechanical laws” (232). He rejects the “pomp of mathematical science” and suggests that instead “the plain truth must come out” (226). Meanwhile, Stephenson’s linking of the principle of life to animal heat can be seen to inform practical advice in resuscitation literature, where there is frequently an emphasis on heating the body through placing it near fire, rubbing, wrapping in blankets, and so on. This (again characteristic) conjunction of specific practical curative advice within a larger theoretical context marked by both vehement assertions of the specific nature of life, and methods of investigations of it, together with an absence of anything other than ‘provisionally inexplicable’ accounts of vital operations, is striking. The very repeated elaboration (and, presumably, enactment) of what were to become such canonical rituals in resuscitation practice masks the dependence, within theories of life, and especially following their rejection of mathematical methods, on the supposition of unknown principles, forces, or operations, to which life itself could be traced. Far from, in Stephenson’s words, “the plain truth” coming out, the scene of resuscitation instead enabled suppositions and hypotheses about the nature of life and its operation to attain a kind of authority and acceptance, through their association with an apparatus of practical recovery treatments which were able, at least on sufficient occasion, to demonstrate real efficacy.

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Written thirty years after Stephenson, William Cullen’s *Letter to Lord Cathcart* (1776) offers a quite different account of the vital principle which sustains life after apparent

death, whilst also yoking that account to a remarkably familiar litany of recommended resuscitation practices. Cullen was, with Whytt and others, a prominent (and at points controversial) figure in the development of vitalism at Edinburgh.<sup>25</sup> He lectured in chemistry at Glasgow University from 1747, and later succeeded Robert Whytt as professor of medicine at Edinburgh; his contributions in both fields were strongly vitalist. His teaching was received as a significant, even outrageous, corrective to the dominant iatromechanism, to the extent that Cullen was formally warned by the Provost against bringing the university into disrepute. However, his lectures on medicine, published as *First Lines of the Practice of Physic* (1777), with its assertion that the reactions of the body were very different to mechanical actions, became “one of the most important late eighteenth century correctives to Boerhaave,” and his *Nosology* (1769) was in print continually into the early nineteenth century.<sup>26</sup>

By 1776, Cullen had become the prominent medical authority at Edinburgh; in this capacity he was asked to provide a summary of advice regarding resuscitation practices.<sup>27</sup> As in Stephenson’s account, Cullen asserts that life “does not immediately cease upon the cessation of the action of the lungs and heart, and the consequent ceasing of the circulation of the blood.” But, whereas Stephenson had looked to animal heat and the chemical processes of bodily fluids for an explanation of the recovery of life, Cullen – in line with Edinburgh’s focus on the nervous system – identifies the sensibility and irritability of the nerves and fibres as the condition in which the vital principle consists:

Though the circulation of the blood is necessary to the support of life, the living state of animals does not consist in that alone, but especially depends upon a certain condition in the nerves, and muscular fibres, by which they are sensible

and irritable, and upon which the action of the heart itself depends. It is this condition, therefore which may be properly called the vital principle in animals; and as long as this subsists, or though much weakened, as long as it can be again restored to its activity and vigour, while, at the same time, the organisation of the parts remains entire, it is presumed, that the action of the heart and lungs, the circulation of the blood, and therefore all the functions of life, may also, though they have many of them long ceased, be again entirely restored.<sup>28</sup>

This is as much theoretical detail as Cullen gives in the *Letter*; the remainder of the document suggests a range of measures for the recovery of the apparently dead, many of which echo Stephenson in their emphasis on warming and stimulating the body. But where Stephenson had speculated that heat would stimulate changes in bodily fluids which in turn would stimulate the action of the heart, Cullen's implication is that animal heat is necessary for the operation of the "vital principle" in the nerves, and that stimulation of the body's irritability would thereby "restore the activity of the whole system."<sup>29</sup> There is no further elaboration of how this might come about, however; instead, theoretical statement gives way to an extended account of practical interventions and resuscitation treatments, whose efficacy is implied not only by its relation to the loosely-sketched medical theory, but also by its detail and length. This relation between theory and practice in the *Letter* brings about its own particular effects within the rhetorical economy of the text. The possibility of resuscitation, insisted on by the very length and detail of means to that end, supplements and eclipses the opacity of the "vital principle," vitalism's "provisionally inexplicable" solution to the mysteries of "hidden nature." Whilst the cause of resuscitation is unknown,

that mystery can be approached through the accumulation of observed fact, which becomes an established body of knowledge, or, in Cullen's own phrase, "generalised fact." The *Letter to Lord Cathcart* can thus be read as the narrative effect of vitalism's characteristic epistemic structure, its gestural theoretical sketches of the physiological functions involved in the recovery of life providing a suggestive and enabling frame within which the proximate knowledge of resuscitative practices may be elaborated in detail.

Of course, the *Letter*, designed to communicate resuscitative practices to an audience beyond medical specialists, may not be the best place to find extended theoretical accounts of bodily operations. Nevertheless, other writings of Cullen's reinforce the sense that the relative brevity of the *Letter's* discussion of the vital principle corresponds to an epistemology which, given the difficulty of accessing remote causes of bodily operations, instead attends to the perceptible experiences of the body. "We learn nothing of the form of the disease by taking the cause into the definition," he asserted, because causes are "often conjectural."<sup>30</sup> "Proximate," or more local and immediate causes, should be distinguished from remote ones. As this implies, Cullen's epistemology is strongly Humean.<sup>31</sup> Hume had asserted that "to penetrate into the nature of bodies, or explain the secret causes of their operations" is "an enterprise ... beyond the reach of human understanding"; and that "a human body is a mighty complicated machine: ... many secret powers lurk in it, which are altogether beyond our comprehension."<sup>32</sup> Hume is echoed in the Preface to Cullen's *First Lines of Physic* where he notes that inquiry into the moving powers of the animal œconomy "is difficult: the laws of the Nervous System, in the various circumstances of the animal œconomy, are by no means ascertained; and, from want of attention and observation with the view to a system on this subject, the business appears to

many as an inexplicable mystery.”<sup>33</sup> However, the existence of “mystery” does not mean entertaining “fanciful hypothesis” or “capricious principle”; rather, it underlines the need to attend to the body all the more closely: to use “all the physical and mechanical reasoning we might employ concerning the human body.”<sup>34</sup> As Hume had asserted, “we can never pretend to know body otherwise than by those external properties, which discover themselves to the senses.”<sup>35</sup> For both Hume and Cullen, knowledge of living bodies is derived from the evidence of the senses, the observation of regular appearances through which general laws might be formulated, and the use of probable reasoning: from phenomenal, rather than a fully causal, knowledge. Humean epistemology enabled Cullen to reject “hypothesis, and what have been called *theories*,” whilst admitting observations of nature as “facts,” and to offer doctrine as a “generalisation of facts.”<sup>36</sup> The opacity of his account of the vital principle, in both the *Letter to Lord Cathcart* and in his work more generally, follows from this. Not itself an object of inquiry, because not available to knowledge of the senses, it is a conjectural cause which aids the generalisation of facts into a system. But even if a sophisticated epistemology underlies the opacity of the “principle” through which reanimation is brought about, the opacity — even mystery — of that principle nevertheless remains.

Cullen’s medicine thus posits the body as the site of disease (or other bodily phenomena) whose causes become more conjectural the more remote they are from observed effects: the body is inserted into a network of knowability which privileges the present and proximate against the distant and remote. The moment of reanimation, which pits the substantive power of a palpable bodily event against an ever-receding chain of knowable causes, could be read as a *mise-en-scène* of this epistemological state. Even

though the remote cause of reanimation (such as the putative vital principle) is unknown, its proximate cause (whether heating the body, blowing air into the lungs, application of electrical charge, or similar) is known, and its effects made dramatically evident. Equally, reanimation constituted a sensational staging of the body's powerful capacity to override the seemingly fatal consequences of its immediate historical experience, thereby challenging the usual construction, in Scottish medicine, of the body as passive register of material experience.<sup>37</sup> Reanimation thus presented a resonant image of somatic power countering historical fate, and indeed (in the instance of the reanimation of would-be suicides) the agency of the body's inhabitant.

These questions of cause and volition in relation to the life and death of the body recur in Hume's essay 'Of Suicide'. Although resuscitation literature does not address suicide explicitly, there is an obvious link: both resuscitation and suicide concern the intervention of human action to bring about, respectively, life to a dead body, or death to a live one. Indeed, the Humane Society recognised that resuscitation was regularly practiced on the bodies of would-be or actual suicides, as was the case with Wollstonecraft.<sup>38</sup> In the course of his essay, Hume modifies the sceptical tone of his early *Treatise* and *Enquiry*, in which the "secret causes" or "powers" of the body are beyond human understanding, to describe the act of suicide as "a voluntary action anticipat[ing] the effect of blind causes."<sup>39</sup> The flip side of Humean scepticism about knowledge of the body is that volition can anticipate regular patterns of events; probable knowledge, based on the regular appearance of observed phenomena, is efficacious to the extent that life can be extinguished. Formulated as the exertion of will over blind cause, suicide demonstrates the extent of the subject's powers over the body, even in the face of the mystery of the body's "blind causes."

For all the controversy over suicide, sufficient for Hume to withhold his essay from publication, reanimation posed potentially yet more complex questions of volition, will and agency, in relation to both the object and the agent of resuscitation.<sup>40</sup> Wollstonecraft described her resuscitation as being “inhumanly brought back to life,” suggesting that it countered her agency over her own life as a rational, self-directing being.<sup>41</sup> Arguably, propaganda surrounding the Humane Society, which presented its actions in benevolent terms which resonated with the sentimental values of the time, insulated it from criticism of the moral implications of its activities.<sup>42</sup> But reanimation, as well as reversing suicide, might also be considered a repetition of it, in that it repeats, in Hume’s formula, the exertion of volition over blind cause. In fact, however, in resuscitation, the epistemological gap – the blindness – which in suicide characterises cause, but which can be overwritten by the anticipation of volition, becomes more marked, potentially to impede and characterise volition too. How reanimation takes place, and indeed whether it will take place at all, are both unknown; if it does take place, does the volition which brings it about belong to the agency of the resuscitator, or to the body, or to some combination of both? Wollstonecraft’s assertion of the right of self-determination implies a faith that volition is able to deliver it, even despite the blindness of cause; but reanimation tests the ability of others to determine an individual’s bodily fate, exposing the vulnerabilities of volition, both in terms of what it can bring about (its powers over the body), and in terms of what, and even where, it is.<sup>43</sup> Situated at the endpoint of volition’s ability to anticipate cause, reanimation thus risked exposing the ‘blindness’ of knowledge, and the limits of acting on patterns of regularly observed appearances. Something like an admission of this is conveyed in Cullen’s comment in the Preface to his *First Lines of Physic*, that the “*vix medicatrix nature* [the body’s ability to heal itself] must unavoidably be received as a fact; yet, wherever it is

admitted, it throws an obscurity upon our system; and it is only where the impotence of our art is very manifest and considerable, that we ought to admit of it in practice.”<sup>44</sup> Even though, as Jane Shaw states, Hume’s definition of a miracle was the violation of a law of nature, it was perhaps the obscurity which surrounded the practice which prompted him to state that it was a “miracle, that a dead man should come to life”.<sup>45</sup>

If, for Hume at mid-century, the return of a dead man to life constituted the very definition of the miraculous, by the final decade of the century resuscitation was a recognised practice, enacted throughout Europe, and celebrated in cultural and philanthropic events, sermons, literary and other publications. But these questions of volition, agency, and the capacities of bodies to register, or resist, the forces of history, also carried a political dimension, ready to be mined in the final years of the century. Reanimation, as a trope of resistance to, or overturning of, a seemingly inevitable fate, offered itself for obvious exploitation as a way of figuring the transformation of given historical reality; the notion of a powerful agency, operating without the intervention of any known origin, is equally compelling. What are the politics of an event whose presence speaks more loudly than any ordinary cause? The existence of such questions, implicit within medical attempts to theorise reanimation, explains the ease with which discussions of resuscitation spilled over into cultural and political domains where their implications were explored in different ways by William Hawes and John Thelwall.

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Hawes and Thelwall provide two instances of the cultural life of vitalism, as manifested in the humanitarian culture associated with the Humane Society and in radical literary writing.<sup>46</sup> As stated earlier, the cultural life of resuscitation in fiction, from



*Frankenstein* onwards, is well-recognised. Fiction presents a realm where the extended possibilities of what are often presented in a probabilistic narrative are licensed and enabled by the genre's defining distance from any necessary adherence to proven fact. Here, I trace how the creative possibilities of the credible and probabilistic, combined with the mystery which continues to mark resuscitation, are developed in two different directions, in the propagandistic addresses of Hawes, and in the literary work of Thelwall.

The Humane Society, founded in 1774 by Hawes and others, both depended on and further inculcated a humanitarianism characterised by the self-conscious performance of philanthropy, charity and sensibility. Its participation in the well-documented sentimental culture of affective benevolence which flourished in the second half of the eighteenth-century enables us to ask whether, and how far, that culture was informed by the vitalist physiology on which resuscitation drew.<sup>47</sup> If there was a link, I suggest that it had a very particular shape or character, which reflected the way vitalism ultimately rested on the "provisionally inexplicable," and which informed the nature of the cultural expressions associated with the Humane Society. It is usual for critical studies seeking to explore the relationship of scientific knowledge to contemporary culture to identify cultural responses to salient scientific facts, discoveries, or theories. By contrast, I suggest, more complexly, a relation between the *absence* of secure scientific knowledge underlining the practice of resuscitation, combined with vitalism's particular methodological manoeuvrings, and the flowering of the cultural life of vitalism in the various activities and cultural phenomena associated with it.

As we have seen, writings on resuscitation typically offer a combination of reticence and necessary supposition in their theories of the cause, origin, or operation of life within

the animal œconomy, paired with a miscellany of suggested medical interventions. This epistemologically-specific culture of knowledge – oriented towards the proven ‘facts’ of empirical practice, sceptical of hypothesis, but seeking some form of systematic theoretical framework – links medical practice to contemporary Scottish philosophy. I suggest there is a direct link between the cultural life of vitalism as incubated by Hawes and others, and the particular culture of knowledge in which resuscitative practice was addressed – in which methodological circumspection prohibits fanciful hypothesis whilst seeking ‘mysterious’ knowledge of obscure aspects of the body’s operation. Indeed, it might be possible to say that the cultural life of vitalism was predicated precisely on the heady and suggestive combination of the limits of knowledge understood by Cullen and his vitalist colleagues, paired with powerfully-felt evidence of practical success in achieved resuscitations. The combination of successful practical intervention to save lives, matched with a desire for fuller knowledge of the animal œconomy, which in turn was carefully disciplined by strongly-felt rules of method in philosophical practice, arguably enabled and stimulated the climate of suggestion and possibility exploited by Hawes and others to establish widespread acceptance and celebration of resuscitation as an eminent practice of benevolence and sentimental philanthropy. What, within the medical and scientific community, cannot be explained, but is nevertheless repeatedly recognised as a recurrent phenomenon, found a unique place in a culture which was ready to celebrate, promote, disseminate and proselytise, and which was less bound by methodological self-regulation. In this context, it is notable also, that the activities of the Humane Societies reached a peak in the last decades of the eighteenth century, before the comprehensive account of the biological cause of death produced by Xavier Bichat at the century’s end.<sup>48</sup> From this co-incidence of the identification of the cause of death, with the decline of cultural activity in relation to

resuscitation, it follows also that the Humane Society's cultural heyday co-incided too with the period in which the knowledge of life was 'provisionally inexplicable'. It is possible, then, that what, in a natural philosophical context, was experienced as an epistemological gap to be carefully negotiated, was, in other cultural domains, a spur to creative activity.

Hawes' *Address to the King and Parliament of Great-Britain, on preserving the lives of the inhabitants* (1782) provides one case-study in the transition of a scientific language of resuscitation into a different cultural register. It exhibits the same convergence of "medical, ethical and philosophical" discourses as McGuire identifies in the sub-genre of anniversary sermons preached on behalf of the Humane Society.<sup>49</sup> It demonstrates in particular how phrases which serve as "provisionally inexplicable" place-holders are transferred and elevated, to be given an almost incantatory power within Humane Society discourse. Where Stephenson, Cullen, and others are reticent on the "vital principle" which might spark the return of life in the body, for Hawes the language of stimulus and sparks is given prominence to become a watchword, slogan or refrain – as though it would accrue a performative power if sufficiently invoked.<sup>50</sup> It is there in the epigraph from Shakespeare's *Pericles* – "Death may usurp on nature many hours; And yet the first of life kindle again / The o'er-presst spirits" – and on the motto on the medals given by the Humane Society to those whose endeavours have saved lives: *Lateat Scintillula Forsan* ("A small spark may perhaps lie hid"). Where Cullen eschewed hypothesis with methodological nicety, Hawes embraces the very register of possibility (of which the epigraph or motto is a suggestive expression) even at its most unlikely extremes. His insistence in the *Address* on the saving of lives even at the most extreme limits of possibility elevates unlikelihood to a cultic status; achieving resuscitation even in the face of extreme improbability, at the very limits of what

the practice has previously been known to achieve, only swells the virtue of resuscitator to an even greater extent.

Indeed, the *Address to King and Parliament*, in its enthusiastic extension of what might be considered possible, offers a hypothetical vision which extends beyond the mere recovery of drowned persons as a matter of ‘police’, as in Cullen’s *Letter to Lord Cathcart*. Its is a grander, utopic vision in which all deaths, of the old or young, sick or healthy, sudden or prolonged, are potentially reversible through the widespread establishment of institutions for the dead, mobilisation of trained medical professionals, systematic rewards, and so on, in a way which amounts to an entire revisioning of the social and medical life of the nation. In this, it acknowledges, and attempts to alleviate, widespread contemporary concerns about general, and in particular urban, population decline; medical practice is here yoked explicitly to national (and, given the increasing recognition of the importance of the population to national wealth, economic) service. Thus the *Address* offers a more generalised vision of how the Humane Society might protect and preserve the lives of the populace, than the more specific act of suicide intervention often addressed in other Humane Society discourses.<sup>51</sup> Whilst McGuire has stressed the Humane Society’s transnational (including colonial) reach and network, Hawes’ *Address* shows how it could also attempt to influence domestic policy within the state. Although McGuire identifies an increasingly “nationalist hue” in the discourses of the Humane Society in the last decade of the eighteenth century, Hawes’ *Address* demonstrates that attempts to influence national policy existed before this; it also shows that national concerns at this time were marked by a primarily sentimental humanist, rather than patriotic, valence.<sup>52</sup> In this text, what has been brought to life – more than a drowned body – is an entire culture of humanitarianism

institutionalised in laws, social regulation and individual practice, a vision which rests on the promise of the potential reversibility of apparent death, through the operation of a 'vital principle' whose powers, because unknown, are reimagined on grand scale. In Hawes's sentimental vision, resuscitation does not simply bring new life to individual bodies, but extends to an imagined revivification and transformation of the entire body politic.

In Hawes's *Address*, the medical practice of resuscitation is amplified by philanthropic discourse into an ethical excess, to describe a benevolent social sublime unimpeded by precise knowledge of the biological processes of life and death – indeed, arguably sustained by such ignorance. In his philanthropic vision, Hawes anticipates a future entirely defined by good works, where the power of humanity and disinterestedness, powered by medical technique capaciously evoked, but imprecisely comprehended, is such that it is even possible to imagine death itself substantively banished. But Hawes' inflated vision, which elevated the powers of science into an ultimately imaginary realm, was not the only cultural response to resuscitation. The sentimental register which for Hawes enables the celebration of a heroics of resuscitation met a politically-precise critique in the pages of Thelwall's literary compendium, *The Peripatetic* (1793), published a decade after Hawes' *Address*.

As a poet and journalist who, in the same year as *The Peripatetic* appeared, also published an *Essay Towards a Definition of Animal Vitality*, which demonstrated detailed knowledge of debates over life's vital causes, Thelwall might be thought as much a celebrant of resuscitation's cultural possibilities as Hawes himself.<sup>53</sup> Indeed, he had acted in just such a role earlier in his career, publishing poems inspired by the reports of the Humane Society, which depicted morally elevating scenes of reanimation in movingly sentimental detail.<sup>54</sup>

And *The Peripatetic* itself also offers, in its 'Digression for the Anatomists', a poetic celebration of the "absolute vitality" of the body which describes the "pure electric fire" being imparted to the blood as it is pumped by the heart through the lungs.<sup>55</sup> But, in keeping with the nature of *The Peripatetic* as a generically-ambiguous "quasi-novel" or "medley" text, influenced by Sterne's *Sentimental Journey* and sharing with it the ability to at once conform to and satirise sentimental discourse, its treatment of resuscitation escapes the sentimental mode through which the story of Belmour, the melancholy Wanderer who is the eventual object of resuscitation, has been narrated.<sup>56</sup> Instead, the event of resuscitation disrupts and displaces the text's sentimentalism and ushers in a barbed exposure of the petty corruption and abuses of the legal and juridical professions, and their representatives. The generic hybridity of the text, announced in its subtitle as "politico-sentimental," is thus fulfilled, even whilst Thelwall addresses the pressing issue of what McGuire has described as the "uneasy" relation of the practitioners of resuscitation to the juridical establishment.<sup>57</sup> Far from being an end in themselves, readerly sentiments, aroused by the tale of Belmour's sufferings, are thus refused apothecic expression in an extended effusion over the scene of resuscitation, and are instead directed to the quite different concern of the "absurdity" of the laws and practices impeding the work which the Humane Society carried out.

Belmour's resuscitation, countering the generic expectations fulfilled by his story thus far, is thus a moment of bathos: indeed, the event itself takes place out of sight, performed by anonymous medical functionaries, and its outcome is reported rather than witnessed.<sup>58</sup> Unlike Dr X's recovery of Clarence Hervey, there is no attempt to be credible or probabilistic; where Edgeworth blanks out Dr X's identity, Thelwall obscures the entire

resuscitative scene. If Edgeworth exploits the “agreeable” emotions of surprise and wonder produced by the miracle of resuscitation to add to the fascinations of her narrative, Thelwall brings sentimental affect up short against politico-juridical facts. Resuscitation gives way to the farcical attempt by an inquest man (the coroner’s functionary) to prosecute for the removal of a dead body, despite protestations that Belmour was no longer dead; the inquest-man further attempts to incite a riot, in order that its leaders can be prosecuted at profit to legal practitioners. It is evident that the law has demonstrably failed to keep pace with the medical practices which complicate its overly-rigid definition of life and death; further, by preventing the removal of a body, it impedes the possibility of saving life, and regards heroic resuscitators as objects for exploitation and criminalisation. The scene thus constitutes an attack on the stupidity of the law and the self-interest of those who seek to profit from enforcing it. Resuscitation’s evident achievements must be accompanied by the banishing of self-interest, chicanery, and the unreformed operation of the law. Thelwall’s denouncement of the law as “the friend of Oppression, or the foe of Benevolence and Humanity,” redirects sentimental language to point out the need to reform the very social and legal institutions which for Hawes would have presided over a new era of resuscitated life.<sup>59</sup>

For McGuire, 1793, the year in which the Humane Society received royal patronage, marks the shift towards what she identifies as its increasing deployment of a nationalist rhetoric of British practical benevolence.<sup>60</sup> Hawes’ *Address* suggests something of the origins of the inflation of sentimental rhetoric into patriotism. But Thelwall’s 1793 satire on the judiciary shortcircuits the sentimentalism which has hitherto safeguarded the work of the Humane Society, in an “interruption” of resuscitation’s “interesting scene.”<sup>61</sup> This

interruption encapsulates the literary strategy of *The Peripatetic* as a whole, which, as a compendium, puts the unknown of the gap, absence, or space at the heart of its generic identity. In this, it refuses the systematic totality sought by Cullen, which he acknowledged could only be achieved by accepting the “obscurity” of *vix natura*. Instead, Thelwall blanks the potential presence of resuscitation in his text, in order to foreground what is needed in the world to enable its ‘miracle’ to be performed. In this, he projects a valuable critical and cautionary note into the cultural life of resuscitation, and prompts his reader to reflect that, whatever the mysteries, and efficacies, of its medical procedures, the scene of resuscitation nevertheless, like so much else at this time, stages the need for a different kind of miracle – that of political reform.

Cullen’s assertion that the obscure “fact” of the body’s ability to self-heal could only be admitted where medical art was impotent, illuminates how contemporary medical practice was built around and alongside opaque knowledge of the body. The unknown lay similarly at the heart of reanimation narratives in scientific culture and beyond. Whether fictional, scientific, or addressing popular sentimental politics, resuscitation narratives demonstrated the creative possibilities of the “provisionally inexplicable,” showing how, in an epistemologically-specific culture of knowledge, an absence of scientific “fact” enabled the flowering of resuscitation’s cultural life. In *Belinda* and other novels, the surprise and wonder prompted by the mysterious event of resuscitation added to fiction’s affective power. In vitalist writing, the observable bodily event of reanimation countered gaps in scientific knowledge, and offered the proximate knowledge of bodily experience against an impossible search for unknowable remote causes. And for Hawes and Thelwall, reanimation marked the possibility of imagining different political futures. Posing, fundamentally, the



question of the relationship between event and cause, resuscitation addressed an issue at the heart of empirical knowledge itself, even whilst bringing it up against the limits of its own unknowns: the “secret cause” of life, and the “inexplicable mystery” of bodies. That relationship between event and cause is central to the project of narrative too, which, whether fictional, scientific or sentimental, seeks to fold the former into a credible account of the latter. Narratives of resuscitation show how, effective even in the marked absence of knowledge, reanimation asserted the possibility of praxis unshackled from certainty, and a way of moving beyond an epistemic scene defined by understanding to one marked by the powers of affect.

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<sup>1</sup> David Hume, *An Enquiry Concerning Human Understanding* ed. L. A. Selby-Bigge (Oxford: Clarendon Press, 1975), 115.

<sup>2</sup> Maria Edgeworth, *Belinda*, ed. Kathryn Kirkpatrick (Oxford: Oxford University Press, 1994), 92-5. Later references are given parenthetically in the text.

<sup>3</sup> See Amy M. King, *Bloom: The Botanical Vernacular in the English Novel* (Oxford: Oxford University Press, 2003), 59.

<sup>4</sup> The novel also manifests its fascination with resuscitation later in the text, where it is discussed alongside other topics of contemporary scientific investigation. See Edgeworth, *Belinda*, 238.

<sup>5</sup> Hume, *Enquiry*, 117.

<sup>6</sup> The first such society was founded in 1767 in Amsterdam; London's Royal Humane Society was founded in 1774. For the history of humane societies, see Elizabeth H. Thomson, "The role of physicians in the humane societies of the eighteenth century," *Bulletin of the History of Medicine* 37 (1963): 43-51; see also Kelly McGuire, "Raising the Dead: Sermons, Suicide, and Transnational Exchange in the Eighteenth Century," *Literature and Medicine* 28:1 (2009): 1-32 (12).

<sup>7</sup> Mary Shelley, *Frankenstein, or the Modern Prometheus*, ed. Marilyn Butler (Oxford: Oxford University Press, 2008), 36. For debates over life and death in *Frankenstein*, see Butler's introduction to her edition of *Frankenstein*, Denise Gigante, *Life: Organic Form and Romanticism* (New Haven: Yale University Press, 2009), and Sharon Ruston, "Resurrecting Frankenstein," *The Keats-Shelley Review* 19:1 (2005), 97-116. Ruston also discusses the range of language used to refer to resuscitation, including restoration and reanimation; however her focus on Romantic-era science overlooks the earlier attention to reanimation from the mid-eighteenth century.

<sup>8</sup> See McGuire, "Raising the Dead," 20, 9.

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<sup>9</sup> Peter Hanns Reill, *Vitalizing Nature in the Enlightenment* (Berkeley and Los Angeles: University of California Press, 2005), 120.

<sup>10</sup> Erasmus Darwin, *Zoonomia; or, the Laws of Organic Life* (London, 1794-6), 2 vols, vol 1, 10, 66, 109.

<sup>11</sup> Charles Wolfe, "Vital anti-mathematicism and the ontology of the emerging life sciences: Mandeville to Diderot," *Synthese* 194:3 (2017): 3.

<sup>12</sup> Colin Maclaurin, *An Account of Sir Isaac Newton's Philosophical Discoveries* (London, 1725), 21.

<sup>13</sup> On Newtonian analogy, see Charles Wolfe, "On the Role of Newtonian Analogies in Eighteenth-Century Life Science: Vitalism and Provisionally Inexplicable Explicable devices," in *Newton and Empiricism* ed. Zvi Biener and Eric Schliesser (Oxford: Oxford University Press, 2014), 223-261 (225). The notion of a "provisionally inexplicable explicative device" is adopted by Wolfe from T. S. Hall, *Ideas of Life and Matter: Studies in the History of General Physiology* (Chicago: University of Chicago Press, 1969), 2 vols, vol. 2, 73.

<sup>14</sup> The vital principle was acknowledged as obscure or occult, and as a valid object for scepticism, even by vitalist thinkers; all the more so as vitalist thinking increasingly elaborated theories of living systems which foregrounded organisation, and aggregated connection between parts, over a single vital force or principle as explanatory models. On the varieties of vitalism in this period, including "substantial" and "functional" or "post facto" vitalism, see Charles Wolfe, "Models of organic organization in Montpellier vitalism and beyond," *Early Science and Medicine* 22 (2017), 1-24. Wolfe's account of "functional vitalism" as an attempt to model organic life without reducing it to fully mechanical processes corresponds to my account of vitalist theory in this paper. On scepticism and vitalism, and on organisation in vitalist theories of life, see Wolfe, "Models of organic organization"; Reill, *Vitalizing Nature*, 135-7.

<sup>15</sup> For debate over practice of use of tobacco smoke, for instance, see Sean Quinlan, "Apparent Death in Eighteenth-Century France and England," *French History* 9:2 (1995), 27-47 (41.)

<sup>16</sup> One exception is the brief account of links between the Humane Society and vitalist physiology in John Tercier, *The Contemporary Deathbed: the Ultimate Rush* (Basingstoke: Palgrave Macmillan, 2005), 117-118. By contrast Kelly McGuire's account of resuscitation foregrounds Montpellier vitalism, and constructs a British medical tradition which overlooks the specificity of Scottish medicine at this time. See "Raising the Dead," 7.

<sup>17</sup> See Thomson, "The role of physicians," 44. For other accounts of the history of resuscitation, see [www.royalhumanesociety.org.uk](http://www.royalhumanesociety.org.uk); and Williams, "Luxury of Doing Good."

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<sup>18</sup> William Tossach, "A man, dead in appearance, recovered by distending the lungs with air," in *Medical Essays and Observations Published by a Society in Edinburgh* (London, 1746), 2 vols, vol. 2, 398-99. It was in fact Fothergill's observations on this publication which he read to the Royal Society.

<sup>19</sup> See Roger L. Emerson, "The Philosophical Society of Edinburgh, 1737-1747," *British Journal for the History of Science* 12 (1979): 154-91; and Emerson, "The Philosophical Society of Edinburgh, 1748-1768," *British Journal for the History of Science* 14 (1981): 133-76. On Edinburgh medicine, see Reill, *Vitalizing Nature*, 122; Packham, *Eighteenth-Century Vitalism*, 104-5; Christopher Lawrence, "Ornate Physicians and Learned Artisans: Edinburgh Medical Men, 1726-1776," in *William Hunter and the Eighteenth-Century Medical World* eds. W. F. Bynum and Roy Porter (Cambridge: Cambridge University Press, 2002), 153-176; and Christopher Lawrence, "The Nervous System and Society in the Scottish Enlightenment," in *Natural Order: Historical Studies of Scientific Culture*, eds. Barry Barnes and Steven Shapin (Beverly Hills: Sage Publications, 1979), 19-40. Cullen was a founding member of this society, although not a member of the Edinburgh faculty until the mid-1750s.

<sup>20</sup> Reill calls Whytt a "founder of Enlightenment vitalism." On Whytt, see Reill, *Vitalizing Nature*, 128-9; Packham, *Eighteenth-Century Vitalism*, 105. For Whytt's comparison of his method to that of Newton's in relation to gravity, see Wolfe, "Newtonian Analogies," 225; for varieties of vitalism at Edinburgh see Reill 122, 128-9.

<sup>21</sup> Quinlan, "Apparent Death," 27. See McGuire, "Raising the Dead," 12, for the claim that Winslow's work also inspired William Hawes, discussed later in this paper.

<sup>22</sup> Jacques-Bénigne Winslow, *The Uncertainty of the Signs of Death* (London, 1746), 79-84.

<sup>23</sup> John Stephenson, "Essay on the cause of animal heat, and of some of the effects of heat and cold on our bodies," in *Medical Essays*, vol. 1, 222-244. Later references are given parenthetically in the text.

<sup>24</sup> For the claim that anti-mathematicism is a defining feature of an Enlightenment effort to conceptualize a new ontology for the newly emerging life sciences, see Wolfe, "Vital anti-mathematicism."

<sup>25</sup> For Cullen's attack on mechanism, and his replacement of it with a "consciously constructed vitalism," see Reill, *Vitalizing Nature*, 121-22.

<sup>26</sup> Reill, *Vitalizing Nature*, 122. On Cullen's nosology, see Kevis Goodman, "'Uncertain Disease': Nostalgia, Pathologies of Motion, Practices of Reading," *Studies in Romanticism* 49:2 (2010): 197-227 (197).

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<sup>27</sup> John Hunter, whose career began as apprentice to another product of the Edinburgh Medical School, his brother William Hunter, also published a paper on the recovery of the drowned in 1776. See "Proposals for the Recovery of People Apparently Drowned," *Philosophical Transactions of the Royal Society of London* 66 (1776), 412-25.

<sup>28</sup> William Cullen, *Letter to Lord Cathcart, Concerning the Recovery of Persons Drowned and Seemingly Dead* (London and Edinburgh, 1776), 4-5.

<sup>29</sup> Cullen, *Letter*, 13.

<sup>30</sup> John Thomson, *The Life, Lectures, and Writings of William Cullen*, 2 vols (Bristol: Thoemmes Press, 1997), vol. I, 329-30. Cited in Goodman, "Uncertain Disease," 207.

<sup>31</sup> For a convincing account, see Tamás Demeter, "Post-Mechanical Explanation in the Natural and Moral Sciences: The Language of Nature and Human Nature in David Hume and William Cullen," *Yearbook for European Culture of Science* 7 (2012), 139-168. See also Goodman, "Uncertain Disease". Cullen's Humean epistemology complicates McGuire's claim that medical treatises read like sermons and reflect the "mutual imbrication of religion and science in the vitalist thought of the late eighteenth century." See McGuire, "Raising the Dead," 9-10.

<sup>32</sup> Hume, *A Treatise of Human Nature*, ed. L. A. Selby –Bigge (Oxford: Clarendon Press, 1978), 64; Hume, *Enquiry*, 87.

<sup>33</sup> William Cullen, *First Lines of the Practice of Physic* (Edinburgh, 1777), xxxii.

<sup>34</sup> Cullen, *First Lines*, xx, xxii.

<sup>35</sup> Hume, *Treatise*, 64.

<sup>36</sup> Cullen, *First Lines*, lvi.

<sup>37</sup> See Goodman, "Uncertain Disease," 209.

<sup>38</sup> The Society for the Resuscitation of Persons Apparently Drowned (as the Humane Society was first named) also addressed other kinds of accidental and sudden death. McGuire notes that suicides constituted a "significant part of the society's mandate as the nineteenth century approached." See "Raising the Dead," 3, 16.

<sup>39</sup> David Hume, "Of Suicide," in Hume, *Essays Moral, Political and Literary* ed. Eugene Miller (Liberty Fund: Indianapolis, 1985), 584.



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<sup>40</sup> For contemporary debate over suicide, see “The secularisation of suicide in England, 1660-1800”, Donna Andrew and Michael McDonald, *Past and Present* 119 (1988): 158-70.

<sup>41</sup> See Carolyn Williams, “‘Inhumanly brought back to life and misery’: Mary Wollstonecraft, *Frankenstein*, and the Royal Humane Society,” *Women’s Writing* 8:2 (2001): 213-234.

<sup>42</sup> For attacks on resuscitation, however, see McGuire, “Raising the Dead,” 19-20.

<sup>43</sup> These questions about volition were addressed by Darwin, who, in *Zoonomia* attempted to theorise it as somewhere between a bodily and a mental capacity. See Goodman, “Uncertain Disease,” 213-5. Carolyn Williams argues that Wollstonecraft’s critique is extended in her daughter Mary Shelley’s *Frankenstein*, which for her constitutes an attack on the rhetoric of “self-aggrandisement and gratification” of rescuers, resuscitators and researchers. See Williams, “Inhumanly brought to life,” 214.

<sup>44</sup> Cullen, *First Lines*, xxv.

<sup>45</sup> Jane Shaw, *Miracles in Enlightenment England* (New Haven: Yale University Press, 2006), 160. Hume, *Enquiry*, 115.

<sup>46</sup> For other celebrations of resuscitation in British cultural life see John P. Griffin, “A tale of two paintings and the London medical scene of the late eighteenth century,” *Journal of the Royal Society of Medicine* 83 (1990): 520-523 and Carolyn D. Williams, “‘The Luxury of Doing Good’: Benevolence, Sensibility, and the Royal Humane Society,” in *Pleasure in the Eighteenth Century*, ed. Roy Porter and Marie Mulvey Roberts (Basingstoke: Macmillan, 1996), 77-107. For poems and sermons responding to resuscitation, see Catherine Packham, *Eighteenth-Century Vitalism: Bodies, Culture, Politics* (Basingstoke: Palgrave Macmillan, 2012), 116-121. For more on sermons, see McGuire, “Raising the Dead”.

<sup>47</sup> For another example of sentimental discourse and charitable practice in this period, which intersects with the Humane Society through the figure of Dr. Dodd, see Mary Peace, *Changing Sentiments and the Magdalen Hospital: Luxury, Virtue and the Senses in Eighteenth-Century Culture* (Abingdon, Routledge, 2016); and Mary Peace, “The Unfortunate Dr. Dodd and the limits of moral sense sentimentality,” in *Political Economy, Literature and the Formation of Knowledge*, eds. Richard Adelman and Catherine Packham (New York and Abingdon: Routledge, 2018), 159-182.

<sup>48</sup> Quiglan, “Apparent Death,” 44.

<sup>49</sup> McGuire, “Raising the Dead,” 4.

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<sup>50</sup> The language of sparks may gesture too to the occasional use of electricity to revive bodies.

<sup>51</sup> See, for instance, the concern with suicide, addressed in Dr. Dodd's Anniversary Sermon (1776), discussed in McGuire, "Raising the Dead."

<sup>52</sup> McGuire, "Raising the Dead," 13.

<sup>53</sup> Thelwall's *Essay* rejected Hunterian accounts of vitality in the blood and gestured instead to an external cause as the trigger for the body's state of vitality. An advert for the *Essay* appeared on the verso of *The Peripatetic's* title page.

<sup>54</sup> John Thelwall, *Poems on Various Subjects*, (London, 1787). See Packham, *Eighteenth-Century Vitalism*, 116-119.

<sup>55</sup> John Thelwall, *The Peripatetic* ed. Judith Thompson (Detroit: Wayne State University Press, 2001), 147.

<sup>56</sup> Judith Thompson, "Introduction," in Thelwall, *The Peripatetic*, 46, 20.

<sup>57</sup> McGuire, "Raising the Dead," 2.

<sup>58</sup> Thelwall, *Peripatetic*, 367.

<sup>59</sup> Thelwall, *Peripatetic*, 370.

<sup>60</sup> McGuire, "Raising the Dead."

<sup>61</sup> Thelwall, *Peripatetic*, 367.